

***OPERATING
INSTRUCTIONS***

**MCR™ 4A
MCR™ 4S**

***MULTI-TRACK
CASSETTE
RECORDER***



PEAVEY™
AUDIO MEDIA RESEARCH™

CAUTION: TO PREVENT ELECTRICAL SHOCK OR FIRE HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. BEFORE USING THIS APPLIANCE, READ BACK COVER FOR FURTHER WARNINGS.

Getting Started

Before 'getting started'..... Thank you for purchasing this MCR™ recorder. It is designed to provide the highest standard of recording and reproduction, but bear in mind that the standard of performance of the complete equipment will be limited by the weakest link in the chain. Thus the mixer, external amplifiers, effects units, monitor speakers etc., should all receive careful consideration if full advantage is to be taken of the capabilities of this recorder.

Connecting Power to the MCR™ 4A or 4S

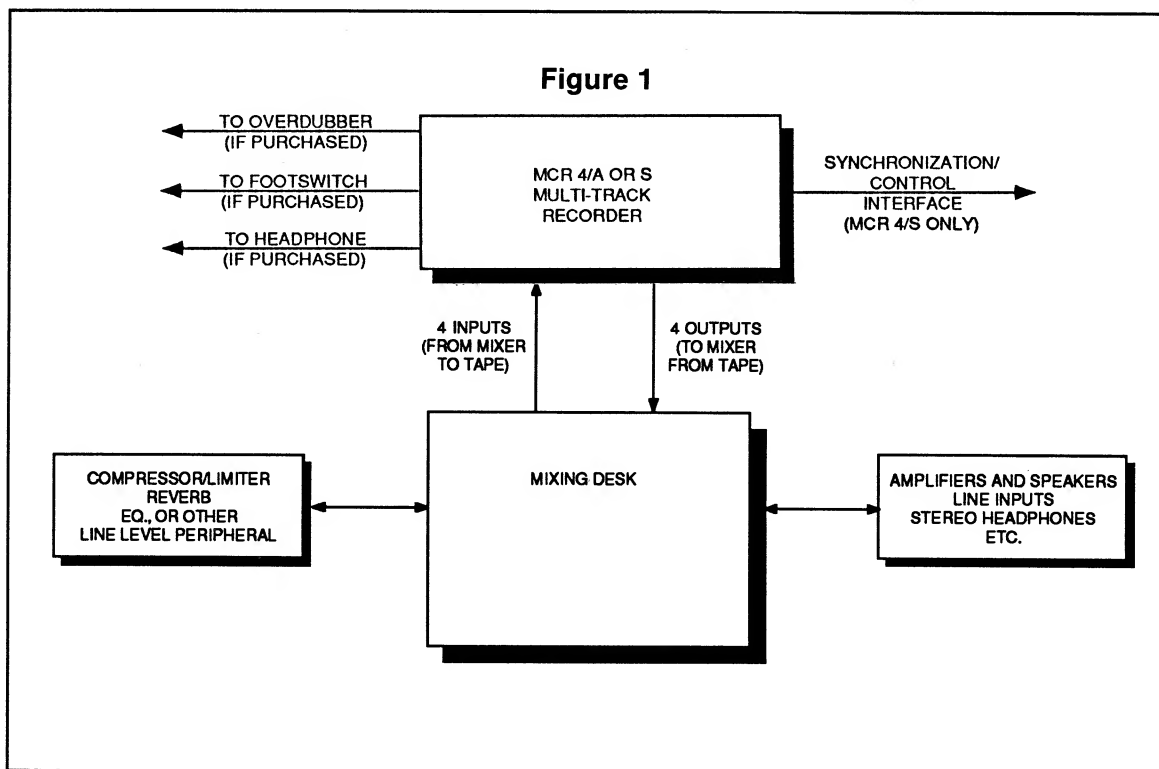
Connect the power plug to a nearby AC power outlet. Do not run audio signal lines close to or parallel with the power cord to prevent hum pick-up. Power can then be applied to the tape recorder by turning on the front panel power switch.

Connecting Signal Lines to the MCR™ 4A or 4S

There are numerous system set-ups and applications in which the MCR may be used; all of which cannot be covered in this operating instruction sheet. For a guideline, you will find a line drawing below that indicates where various standard pieces of equipment are connected in conjunction with the MCR.

Installation:

Equipment of this type may be mounted using a variety of different methods such as: free-standing, in a standard 19" rack by means of the optional Rack Mount Kit RM4, united to a Peavey Audio Media Research™ Model 64 mixer by means of End Bell Kit EBK 1, or to a Peavey Audio Media Research™ Model 42 mixer using an End Bell Kit EBK 2. It is advisable to assemble all the parts in a mock-up form before deciding on the final arrangement to make sure that there are no unforeseen difficulties of operation or inter-wiring etc.



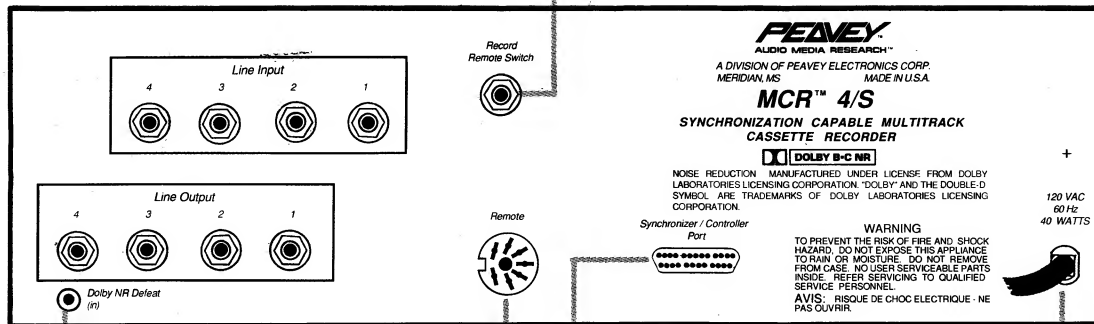
A block diagram of a typical installation is shown in Fig. 1 and the same basic arrangement will apply in whole or part, whatever associated equipment is used with the MCR series of recorders. Installation is quite straight forward and should present no difficulty.

Input and Output Jacks

These connect to and from 'line level' (-10 dBV) type sources such as will be found on most mixers. All the jacks are standard 1/4" mono (tip and sleeve only) type jacks, and will not work with microphones.

Record Ft. Sw. Jack

Will work with any standard guitar amplifier type footswitch (with push-for-on/push-for-off action) that uses a standard 1/4" mono (tip and sleeve only) type jack. A momentary footswitch may be used if desired, but please bear in mind that this must be held in for the duration of the punch in.



Dolby® Defeat

This is the Dolby® defeat switch for track four. It should be used when MIDI or SMPTE signals are recorded on this track. This switch is recessed to prevent inadvertent operation, and can only be accessed by using a slim pointed object.

Remote Jack

This is for use with the optional Peavey Audio Media Research™ Overdubber™ which will enable you to control record, rewind, pause, and play functions by remote foot control.

Power Supply

Power input is the attached line cord. For 220/240 volt use, a selector is provided above the power cord strain relief.

Synchronizer/Controller Port (MCR™ 4/S only)

This DB25 socket is for remote transport control and synchronization purposes when used with a synchronizer/controller such as the Peavey Audio Media Research™ SyncController™. It provides for control of recording motors and/or other events which the recorder may control (signals out), or which may control the recorder (signals in). See Fig. 3 for diagram of this port's facilities.

Remote Jack

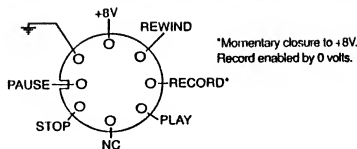
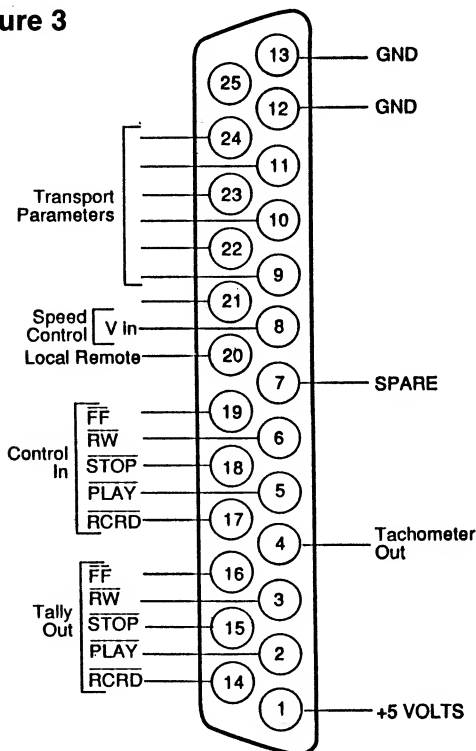


Figure 3



A NOTE ABOUT OVERDUBBING:

Overdubbing is the process of recording tape tracks while listening to one or more tape tracks that have been previously recorded. Multi-track tape recorders will reproduce previously recorded signals in synchronization (sync) with any track or tracks that you desire to record later. The overdubbing process can happen in two different types of procedures:

Recording An Entire Track Or Overdubbing

Suppose you have recorded three tracks (#1 bass, #2 drums and #3 guitar) and now you are ready to record the vocal on the #4 track. Rewind the tape to a point prior to the beginning of the song, place track #4 in "record ready" mode, push master record and pause button to monitor the input signal (and adjust the record level). When you are satisfied with the record level, simultaneously push master record and play buttons to place track #4 into record mode. Then record the vocal part all the way through the tune. This process is referred to as "dubbing" or "overdubbing". When finished, press "rewind" (which will disable the record mode) to return to the beginning of the song. Now you can listen to the vocal track and see how you like it. If not satisfied, you can overdub again, and again until you like it.

Punch in and punch out

Suppose you liked the vocal except for the second verse and there were three verses! Wouldn't it be nice to save the first and third verses and just re-record the second? No problem!! First disable the record ready button on track #4 (no channels in record ready). Return to the beginning of the tune and push master record and play simultaneously (placing the machine in record mode and moving the tape). Keep in mind that no track will go into actual "record" mode until the "record ready" button for that channel is activated. Also track #4 will remain in

"playback" mode until you push the "record ready" button. This means that you can hear the first verse you wanted to save, up until the time you want to record the new second verse. A very short time prior to when you must start singing the second verse you should push the "record ready" button for track #4 (which will place it in record mode). When the second verse is over you must push the "record ready" button again to remove that channel from record.

It is important to remember when re-recording a section, that you should only "punch in" or "punch out" in places where there is some blank space on the tape (i.e. no singing or performing) for a few beats or bars. This will prevent accidental erasure of any recorded material prior to the "punch in" point or accidental erasure of any material that follows the "punch out" point. Make sure you have a little room and don't attempt to punch in or punch out on a dime.

Punch-ins may also be achieved while the tape is rolling. The procedure is as follows:

PUNCH-IN: While rolling the tape, press the Play and Record keys simultaneously. You can then enable/disable any of the four tracks' recording facilities by pressing any of the Record Enable keys while the punch-in is in progress. This enables you to selectively enable/disable recording on various tracks thus making multiple-track punch-in overlays possible.

PUNCH-OUT: Press the Play key by itself and your Punch-in will cease to be operative.

NOTE: The machine has to be in record mode to enable the Record Enable keys to work.

Monitoring during punch in and punch out

Any channel will remain in "playback" mode until it enters into the "record" mode. When the track goes into record it will automatically switch to the input signal (so you can monitor what you are recording). When you punch out, the track will automatically switch back to playback mode.

Overdubber™ for the MCR 4A/4S

Historically, musicians doing their own multi-track recording had to be half engineer and half musician. When you do it all, it's difficult to work out musical parts and concentrate on your playing, while punching buttons, moving faders and watching levels to make multi-track tape recordings.

Most musicians are familiar with footswitches used by guitar players. They allow the performer to change effects or sounds with the tap of a foot, with no distraction to their playing; it becomes second nature.

Overdubber™ brings the same concept to multi-track recording. It has only three buttons, it is simple to use and now recording tape tracks can be as simple as using a guitar footswitch.

With Overdubber, you can play and rehearse, pause and work out parts, work on the whole tune, work on any part of the tune, punch in, punch out, rewind and listen, over and over again. Most important of all, you can keep your mind on the music, your foot will do all the control as second nature (with a little practice). You can be 100% musician when you need to be.

Connecting the Pedal Remote

The Overdubber (Model FS 3) connects directly to the "8 pin DIN" remote jack on the rear panel of the MCR 4A/S multi-track cassette recorders. The FS-3 obtains its power and supplies all control signals to the recorder through this connector. The FS 3 requires **no** batteries or other source of power.

Operating the Pedal Remote

The FS 3 comes with a 15' cable which should be of adequate length for most applications. If not, an extension cable can be obtained from your Peavey Audio Media Research™ dealer (model # CCX-15). The pedal remote should be placed on the floor near the area which you will be playing or singing.

All functions of the multi track recorder can be performed with the pedal remote (with exception of fast forward and stop).

With the mixer, microphones, signal lines and pedal remote properly connected to the unit you will be ready to record. Please follow this procedure:

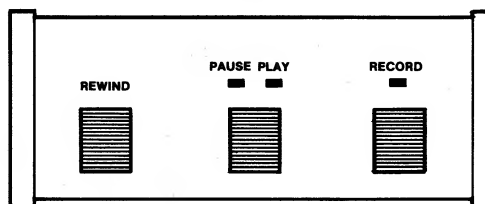
1. Fast forward or Rewind your cassette tape to a blank space prior to the beginning of the tune you will be working on. If nothing is yet recorded, place the tape in a position prior to where you will begin to record.
2. Activate the "record ready" switches for those channels that you wish to record.
3. Push the "Master Record" and "Pause" buttons (to monitor the incoming signal to be recorded).
4. Adjust the level of the mixer input level controls (or the MCR 4A/S "record level" controls) to the desired recording level.
5. Advance the tape to the desired starting point (either at the beginning of the tune or some interim point from which you will start working).

If you are going to "punch in", the tape should be started at an earlier point in the tune to allow time for you to get into the tune and prepare yourself to punch in at the appropriate point.

6. With the tape at the desired location you wish to start from, press the "O Play" button and press the "O Reset" button. The counter must be in the "count" mode.
7. Now you are ready to record using the Overdubber™ Pedal Control.

The location of the footswitch buttons are indicated below:

Figure 4



Overdubber™ Pedal Remote

8. With your headphones on (to monitor), perform the following: Push the play/pause button to place the recorder into "play" mode. This mode will be indicated by the green LED on the front panel of the Pedal Control.

If you desire to play the entire tune to the end (or to some intermediate point) and wish to go back to the beginning of the tune, push the rewind button. The tape will rewind to the beginning ("O" reset point) and will automatically return to the "play" mode and begin playing the tune again. You can do this over and over while you rehearse.

If you are playing and wish to stop the tape at some interim point (to work out a part, without the tape returning to the beginning), just push the play/pause button to place it in the "pause" mode. This will be indicated by the yellow LED on the front panel of the Pedal Control.

If you wish to shuttle back and forth between two interim points in the tune, this may be accomplished by allowing the tape to play to the end of the desired section, push the rewind button for a short period of time, then push play again. If the tape did not go far enough back, push the rewind button again, and then push play to listen. Repeat this procedure until you reach the desired starting point (at this time look at the tape counter/time for a location number). The next time you rewind, you can simply watch the counter/timer and stop at the desired point (with no guesswork).

After you have done the desired amount of rehearsal, you will be ready to record. Allow the tape to rewind to the beginning ("O" reference point) or other desired interim point. Place the recorder in the play mode (by pushing the play button). When the desired point comes to "punch in", push the record button. When you desire to punch out, push the record button again (removing it from record mode). You may also "punch out" (remove the MCR 4A/S from record mode) by pushing the rewind mode (which will cancel the record mode and place the unit in rewind).

NOTE

The record LED indicator above the record button will flash (constantly warning the user that the machine will go into record when the record button is pushed). When you enter into the record mode, the record LED indicator will stop blinking and stay on continuously (indicating that the unit is in "record mode"). The record LED normally functions by flashing when in the "record ready" mode, and staying on continuously when in the "record mode". If for some reason the flashing record LED on the pedal remote is bothering you, this function may be changed by a simple dealer modification. This modification will cause the record LED to stay "off" when the unit is in the "record ready" and will stay on continuously when the machine is in "record mode". If you desire this change, return your FS 3 to your Peavey Audio Media Research dealer for the modification. **Do not attempt this change yourself as it will void your warranty.**

MCR™ 4A/S

Multi-track Cassette Recorder

The MCR 4A/S are state of the art multi-track cassette recorders that have been designed to meet the demands of today's recording professional. The MCR 4A/S have been designed to ensure reliability. They feature steel construction, heavy duty tape transport, zero stop and zero play functions, switchable Dolby® B and C, 1/4" phone interconnect jacks, the ability to be used as a multi-track or stereo mastering cassette recorder, solenoid operated controls, remote control features (Overdubber™ or single button record footswitch), independent channel record selectors, peak reading level indicators for each channel, mute switch for tracks 3 & 4 (to play conventional stereo cassette tapes), front panel headphone output jack with level control, pitch (speed) control, LED status indicators and an illuminated LED counter/timer that reads in minutes/seconds or in four digit reference numbers. The MCR 4A/S can be mounted to either a Peavey Audio Media Research Model 42 or 64 mixer with an endbell kit to create a combined recording system.

The MCR 4A/S are fine four channel multi-track recorders. They will provide years of trouble free service. If, at a later date you decide to purchase a recorder with more tracks, either unit will serve as an excellent cassette mastering machine.

The unique feature of "Overdubber™" gives the musician full freedom to create music by operating the MCR 4A/S with this advanced footpedal system.

*Overdubber™ is an option and is not included with the MCR 4A/S recorders

ZERO STOP

Press this button and the tape will stop rewinding when the counter/timer reaches zero.

COUNT/TIME

When pressed in, the COUNTER/TIMER display will show elapsed time. Release the button and the display shows the tape hub revolution count. The time count is only active when the machine is in the RECORD or PLAY modes.

EJECT

This button, when pushed, will open the cassette door to remove or insert a cassette tape.

POWER

Depress to "On" position to turn on.

REWIND

This button rewinds the tape when pushed. For increased flexibility use these with the ZERO STOP and ZERO PLAY functions.

STOP

Press this button to stop the tape.

FAST FORWARD

This button fast winds the tape forward when pushed.

PLAY

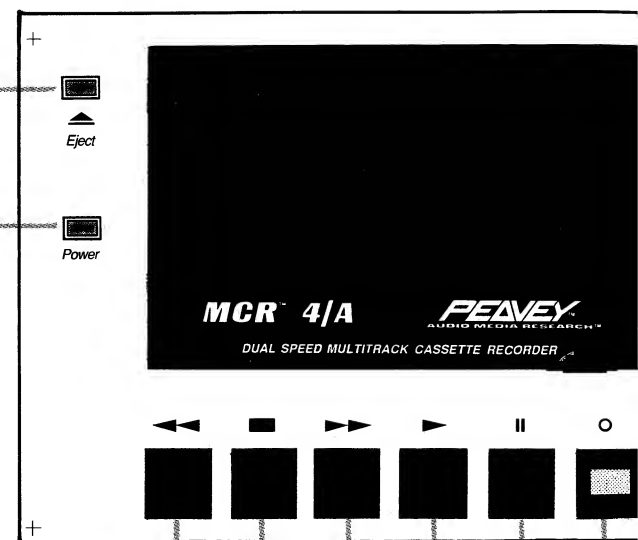
This button, when pushed, will play the tape. A green LED above the button will illuminate when 'play' is selected.

II PAUSE

Press this button to pause the tape. A yellow LED above the button will illuminate when 'pause' is selected.

0 RECORD

If you wish to set the record levels, and monitor your input channels before rolling tape, use this procedure: Press the Record and Pause buttons simultaneously, so putting the machine in the 'Record Monitor Mode'. While it is in this mode the tape will not roll, but any channels that are in a 'Record Ready' condition will reproduce the signals routed to that recorder input channel. To exit this mode, push the STOP button. To move from this mode to record, hold the O RECORD button in, and press PLAY. This will roll the tape, and begin recording instantly. NOTE: This function will not activate if the record lock-out tabs have been removed from the cassette currently in the transport.



COUNTER/TIMER DISPLAY

This will display tape location by counting each revolution of the tape hub, or will show elapsed time up to 59 minutes, 59 seconds.

ZERO PLAY

When engaged and a rewind operation is performed ZERO PLAY will allow the tape to rewind until the counter reads zero, and will then automatically enter the PLAY mode.

ZERO RESET

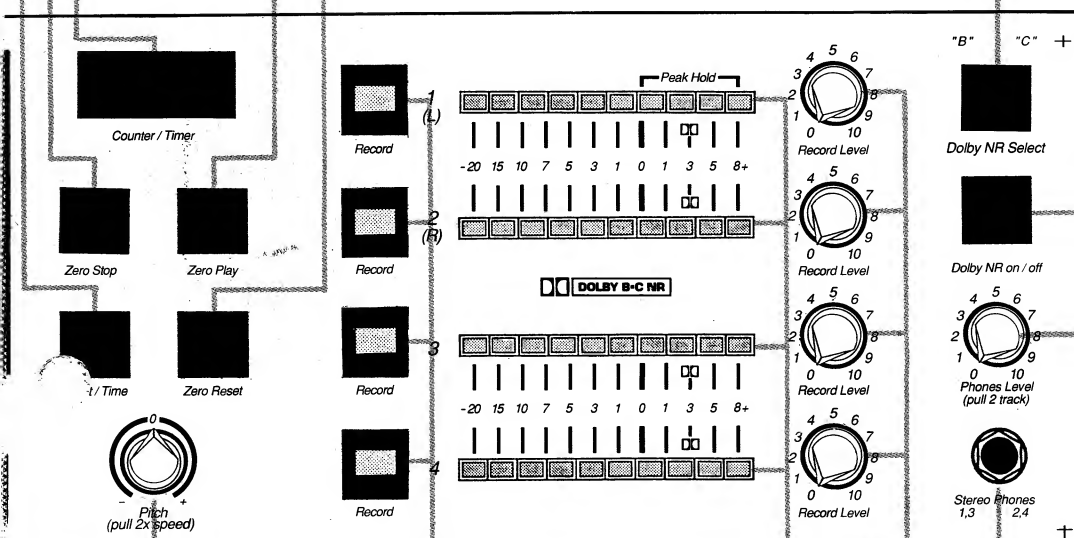
Press this button to set the COUNTER/TIMER display to zero.

DOLBY® NR Select

Will select either Dolby® B or C noise reduction system. Pressed in selects Dolby C, when released (out) the button will engage Dolby B. Two red LEDs show which system is engaged.

DOLBY® NR ON/OFF

Selects Dolby noise reduction either on or off. Pushing the button in will engage Dolby. When noise reduction is disengaged, no LED will be displayed above the Dolby NR Select button.



RECORD (channel RECORD enable)

Each button, when pressed, will cause one of the four tracks to be ready to record. A red LED will light above the active button, warning you that this track is ready to record.

PITCH (SPEED) CONTROL

This provides a user-adjustable variation of the tape speed from the fixed speed up to +/- 12%. The fixed speed can be quickly reached by using the center detent on this pitch control.

RECORD/PLAYBACK PEAK LEVEL INDICATORS

These show the level of either recording or playback for each channel. They are of the 'peak hold' type, meaning that they will indicate and hold the latest peak level for a short length of time. When you are recording, keep the indicator in the yellow portion with perhaps occasional running in the lower red. If the indicator stays in the red portion, you may be making too 'hot' a recording and the resulting sound may be degraded because the tape has been over-saturated. If the indicator is showing green most of the time, then you will not have enough signal reaching the tape, and your recording will be 'noisy' and weak, as the input signal strength is not high enough.

PHONES LEVEL (PULL FOR 2 TRACK)

Sets the volume level in the headphones, and selects the number of tracks heard. With the knob pushed in all four tracks will be heard. With the knob pulled in all four tracks will be heard. 1 & 3 will be present at the left earpiece, and tracks 2 & 4 in the right. Pulling the knob out is for monitoring normal stereo program material. This will select tracks 1 and 2 only. Rotating the knob clockwise will increase the gain to the headphones. This procedure only affects the headphone facility, track 3 and 4 outputs remain active.

STEREO PHONE JACK

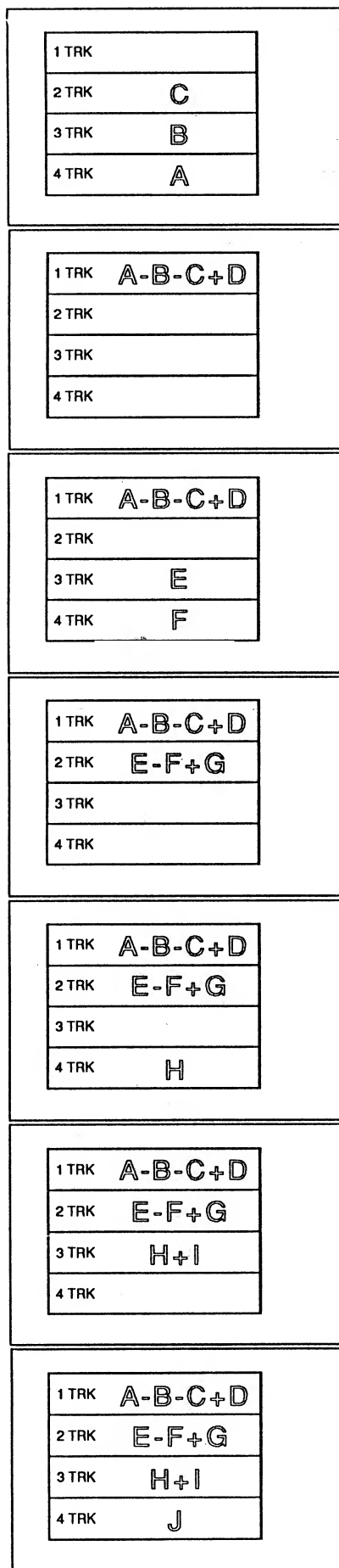
Plug your conventional stereo headphones into this jack. As there are no individual track level controls for this jack, track level adjustment and listening should be adjusted on your mixer and its headphone socket.

RECORDING LEVEL

Each control increases (clockwise rotation), or decreases (anti-clockwise rotation) the recording level on one track.

Dolby® is a registered trademark of Dolby Laboratories Corp.

Figure 5



First, three tracks of the four-track tape are recorded. (A, B, C)

Then these three tracks are set for a balanced mix, and are re-recorded on track 1, while adding a new 'take' (D) on track 1 at the same time via the LINE INPUT.

New 'takes' are recorded on tracks three and four, (E and F)

These new 'takes' are then moved to track two, while adding a new 'take' (G) on track two at the same time via the LINE INPUT.

A new 'take' (H) is recorded on track 4.

This new 'take' is then moved to track 3, while adding a new 'take' (I) on track 3 at the same time via the LINE INPUT.

All the previous 'takes' (A, B, C, D, E, F, G, and I) are moved to track 4, while take J is added. Or if desired J is recorded on track 4 by itself. J may otherwise be used as the carrier track for synchronization signals such as SMPTE or MIDI.

CORRECT TAPE FORMULATION

The MCR 4/A and 4/S are designed to use Type II Chrome (CrO₂) tape, and are factory biased for Maxel XL II-S. This tape will deliver the optimum performance, but other good quality Type II tapes will also yield good results. Do not use standard ferric oxide tapes as they will exhibit a diminished high frequency response.

BOUNCING TRACKS (refer to Fig. 5 as a visual aid)

This technique enables you to make a recording using more than four 'takes'. Normally this would not be possible with a four track recorder, but 'bouncing' gives you the facility to make your machine record as if it has more than four tracks.

For the purpose of these directions, a piece of recorded material will be referred to as a 'take'.

Record your first 'takes' on tracks two, three, and four. Mix these 'takes' onto track one while simultaneously adding another external 'live' take. This will give you four 'takes' on track one, and frees up tracks two, three, and four for new 'takes'. Record a 'take' on tracks three and four, and mix these 'takes' onto track two while simultaneously adding yet another external live take. Record another 'take' on track four, and mix this 'take' onto track three while simultaneously adding yet another external live take. This gives you nine takes, or the equivalent of a nine track tape recorder. Track four will now be empty, and may be used to add yet another take.

The following example illustrates this procedure as a practical script to 'bounce' material from track two and three to track one. Variations of this technique will be simple once you learn the concept.

Step 1: Inactivate the 'RECORD READY' buttons on tracks one and two.

Step 2: Route the track two and three outputs to the track one input through the mixing console. Use the CHANNEL ASSIGNMENT inputs on the Peavey Audio Media Research 64 Mixer (no re-patching necessary). On the Model 42, assign channels 2 and 3 to the 'R' (right) with the PAN controls, then patch the 'R' MASTER OUTPUT to the track four input on the MCR 4/A or S recorder.

Step 3: Activate the RECORD READY button on track one, and adjust the record level during the first bounce 'take'. Since multiple 'takes' can be performed with no signal degradation, you can rehearse the bounce as many times as necessary to get the EQ and relative levels right. Keep trying until track one has the exact mix that you want.

To monitor the bounce, use the #1 MONITOR LEVEL control in the MASTER section of the Model 64 Mixer, or assign the Channel 1 input to TAPE and bring up the LEVEL slider.

As you cannot process a signal individually after it is bounced down, it is a good idea to EQ or add delay/effects to your material before they are combined. If you are short of effects you can process some while tracking, some while bouncing down, and others during final mixdown.

MCR™ 4A/4S SPECIFICATIONS

FREQUENCY RESPONSE

40 Hz - 14 kHz +/- 3 dB
(record/play)

NOISE REDUCTION SYSTEMS

Switchable Dolby® B or C

SIGNAL TO NOISE RATIO

58 dB (no noise reduction)
67 dB w/Dolby B, 71 dB with Dolby C

TAPE TRANSPORT

Normal Speed 1½ ips (4.75 cm/sec)
High Speed 3¾ ips (9.5 cm/sec)
Pitch Control +/- 12%
Wow and Flutter .04% (NAB weighted)
Fast Wind Time 100 sec for C-60 cassette
Tape Counter 4 digit LED type
Stop Watch 59 min and 59 sec
Motors FG servo controlled capstan motor
DC reel motors

HEADS

Hard Permalloy rec/play and ferrite erase
Track Format four channel

RECORD ELECTRONICS

Bias Frequency 85 kHz
Depth of Erase better than 70 dB @ 1 kHz

SIGNAL ELECTRONICS

(Input): Impedance 50K ohms (unbalanced)
Nominal Input Level -10 dBV (316 mV)
Maximum Input Level +18 dBV
(Output): Impedance 1K ohms
Nominal Output Level -10 dBV (316 mV)

Maximum Output Level +6 dBV (2V
for rec/play electronics

DISTORTION

Less than 1% THD @ OVU, 315 Hz

CHANNEL SEPARATION

Better than 50 dB @ 1 kHz

HEADPHONE OUTPUT

For 8 ohm headphones
Maximum Output Level 100 mW

PEAK HOLD, LEVEL INDICATOR

-20 to +8VU (-30 dBV to -2 dBV)

DIMENSIONS

16½" W x 5¼" H x 11¼" D (43.2 cm x 13.3 cm x
28.6 cm)

WEIGHT

16.5 lbs. (7.48 kgm)

POWER REQUIREMENTS

120V AC, 60 Hz @ 40W (220/240 Volt units available
for export)

OPTIONS

RM 4 rack mount kit
FS 3 "Overdubber™" pedal remote,
EBK I end panel kit for recording system

PINS AVAILABLE ON SYNCHRONIZATION PORT

FF, Rewind, Play-Record, Record Enable, FF (out),
Rewind (out), Record tally, Play (out), Tachometer,
Ground, Speed Control, Local Remote

*Dolby® is a registered trademark of Dolby Laboratories Corporation

DANGER

Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time.

The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures:

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
½	110
¼ or less	115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Ear plugs or protectors in the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss if exposure is in excess of the limits as set forth above. To insure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

CAUTION

This unit has been designed and constructed to provide adequate power reserve for reproducing modern music which may require occasional peak power. To handle occasional peak power, adequate power "headroom" has been designed into this system. Extended operation at absolute maximum amplifier power levels is not recommended since this could damage the associated loudspeaker system. Please be aware that maximum power can be obtained with very low settings of the gain controls if the input signal is very strong.

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water; i.e., a bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, heater, radiator or another heat-producing amplifier.
8. Connect only to a power source of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord. For more information on grounding, write for our free booklet, "Shock Hazard and Grounding."
10. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. Metal parts can be cleaned with a damp rag. The vinyl covering parts on some units can be cleaned with a damp rag or an ammonia-based household cleaner if necessary.
13. Care should be taken so that objects do not fall and liquids are not applied into the unit through the ventilation holes or any other openings.
14. This unit should be checked by a qualified service technician if:
 - A. The power supply cord or plug has been damaged;
 - B. Anything has fallen or been spilled into the unit;
 - C. The unit does not operate correctly; or
 - D. The unit has been dropped or the enclosure damaged.
15. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.

RETAIN YOUR PROOF OF PURCHASE LIMITED WARRANTY

Peavey Electronics Corporation warrants this Audio Media Research (AMR) product, EXCEPT for covers, footswitches, patchcords, tubes and meters, to be free from defects in material and workmanship for a period of one (1) year from date of purchase PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is subject to the conditions, exclusions and limitations hereinafter set forth:

90-DAY LIMITED WARRANTY ON TUBES AND METERS

If this product contains tubes or meters, Peavey warrants the tubes or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is also subject to the conditions, exclusions and limitations set forth.

CONDITIONS, EXCLUSIONS AND LIMITATIONS OF LIMITED WARRANTIES

These limited warranties shall be void and of no effect if:

- a. The first purchase of the product is for the purpose of resale; or
- b. The original retail purchase is not made from an AUTHORIZED AMR PRODUCTS DEALER; or
- c. The product has been damaged by accident or unreasonable use, neglect, improper service or maintenance, or other causes not arising out of defects in material or workmanship; or
- d. The serial number affixed to the product is altered, defaced or removed.

In the event of a defect in material and/or workmanship covered by this limited warranty, Peavey will:

- a. In the case of tubes or meters, replace the defective component without charges; or
- b. In other covered cases (i.e., cases involving anything other than covers, footswitches, patchcords, tubes or meters), repair the defect in material or workmanship or replace the product, at Peavey's option; and provided, however, that in any case all costs of shipping (if necessary) are paid by you, the Purchaser.

THE WARRANTY REGISTRATION CARD SHOULD BE ACCURATELY COMPLETED, MAILED TO AND RECEIVED BY PEAVEY ELECTRONICS CORPORATION WITHIN FOURTEEN (14) DAYS FROM THE DATE OF YOUR PURCHASE.

In order to obtain service under these warranties, you must:

- a. Bring the defective item to any AUTHORIZED DEALER or AUTHORIZED AMR PRODUCTS SERVICE CENTER and present the ORIGINAL PROOF OF PURCHASE supplied to you by the AUTHORIZED DEALER in connection with your purchase from him of this product.

If the DEALER or SERVICE CENTER is unable to provide the necessary warranty service, you will be directed to the nearest other AUTHORIZED DEALER OR AUTHORIZED SERVICE CENTER which can provide such service.

OR

- b. Ship the defective item, prepaid to:

PEAVEY ELECTRONICS CORPORATION
INTERNATIONAL SERVICE CENTER
HIGHWAY 80 EAST
MERIDIAN, MS 39301

including ~~there~~ with a complete, detailed description of the problem, together with a legible copy of the original PROOF OF PURCHASE and a complete return address. Upon Peavey's receipt of these items:

If the defect is remedial under these limited warranties and the other terms and conditions expressed herein have been complied with, Peavey will provide the necessary warranty service to repair or replace the product and will return it, FREIGHT COLLECT, to you, the Purchaser.

Peavey's liability to the purchaser for damages from any cause whatsoever and regardless of the form of action, including negligence, is limited to the actual damages up to the greater of \$500.00 or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. Such purchase price will be that in effect for the specific product when the cause of action arose. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. Peavey does not assume liability for personal injury or property arising out of or caused by an unauthorized alteration or non-AMR attachment, nor does Peavey assume any responsibility for damage to interconnected non-AMR equipment that may result from the normal functioning and maintenance of the AMR equipment.

UNDER NO CIRCUMSTANCES WILL PEAVEY BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, INCIDENTAL DAMAGES OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

THESE LIMITED WARRANTIES ARE IN LIEU OF ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE, PROVIDED, HOWEVER, THAT IF THE OTHER TERMS AND CONDITIONS NECESSARY TO THE EXISTENCE OF THE EXPRESS LIMITED WARRANTIES, AS HEREINABOVE STATED, HAVE BEEN COMPLIED WITH, IMPLIED WARRANTIES ARE NOT DISCLAIMED DURING THE APPLICABLE ONE-YEAR OR NINETY-DAY PERIOD FROM DATE OF PURCHASE OF THIS PRODUCT.

Some states do not allow limitation on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. These limited warranties give you specific legal rights, and you may also have other rights which may vary from state to state.

THESE LIMITED WARRANTIES ARE THE ONLY EXPRESS WARRANTIES ON THIS PRODUCT, AND NO OTHER STATEMENT, REPRESENTATION, WARRANTY OR AGREEMENT BY ANY PERSON SHALL BE VALID OR BINDING UPON PEAVEY.

In the event of any modification or disclaimer of express or implied warranties, or any limitation of remedies, contained herein conflicts with applicable law, then such modification, disclaimer or limitation, as the case may be, shall be deemed to be modified to the extent necessary to comply with such law.

INSTRUCTIONS — WARRANTY REGISTRATION CARD

1. Mail the completed WARRANTY REGISTRATION CARD to:

PEAVEY ELECTRONICS CORPORATION
ATTN: WARRANTY DEPT.
POST OFFICE BOX 1230
MERIDIAN, MS 39301

Keep your PROOF OF PURCHASE. In the event warranty service is required during the warranty period, you will need this document.

2. IMPORTANCE OF WARRANTY REGISTRATION CARDS AND NOTIFICATION OF CHANGES OF ADDRESS:

- a. Completion and mailing of WARRANTY REGISTRATION CARDS - Should notification become necessary for any condition that may require correction, the REGISTRATION CARD will help insure that you are contacted and properly notified.
- b. Notice of address changes - If you move from the address shown on the WARRANTY REGISTRATION CARD, you should notify Peavey of the change of address so as to facilitate your receipt of any bulletins or other forms of notification which may become necessary in connection with any condition that may require dissemination of information or correction.
3. Should you have any questions or problems, you may contact Peavey direct by telephoning (601) 483-5372. Any correspondence with the factory concerning this product should include the serial number of the item(s).



Features and specifications are subject to change

A DIVISION OF PEAVEY ELECTRONICS CORPORATION 711 A Street, P.O. Box 2898, Meridian, MS 39302-2898

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